ORACLE MASTER DATA MANAGEMENT (MDM)

AN APPLICATION FOUNDATION SOLUTION

KEY BENEFITS
• Supports Business Process Optimization
• Increases Application ROI
• Strategic Entry Point for Service Oriented Architecture
• Foundation for Data Warehousing and Business Intelligence
• End-to-end Data Quality with MDM Aware Applications
• Supports Strong Data Governance controls
• Key step on the path to ERP Consolidation

OVERVIEW
It has been said that data outlasts applications. This means that an organization’s business data survives the changing application landscape. Technology advancements drive periodic application re-engineering, but the business products, suppliers, assets and customers remain. Oracle’s Master Data Management (MDM) solution is a set of applications (MDM Hubs) designed to consolidate, cleanse, enrich, and synchronize these key business data objects across the enterprise and across time. It includes pre-defined comprehensive data models with powerful applications to load, cleanse, govern and share the master data with all business processes, operational applications and business intelligence systems.

SOLUTION COMPONENTS

Enterprise MDM
Oracle provides a multi-entity Enterprise MDM solution. For each major master data dimension, Oracle delivers complete MDM capabilities in the form of an MDM Hub. These hubs provide: data models for the dimension; data steward workbenches to manage the consolidation of the data from all connected systems; data quality tools tailored to the nature of the master data; data governance tools for the business user; extensive application integration to share the governed data with all appropriate operational applications; and data maps for key analytical systems such as data warehouses and operational business intelligence dashboards. The following hubs are available today along with various industry specific versions:

• Oracle Customer Hub
• Oracle Product Hub
• Oracle Supplier Hub
• Oracle Site Hub

End-to-end data quality is provided by Oracle Data Quality servers for structured data and Oracle Product Data Quality for unstructured data.

In addition, Oracle MDM includes Data Relationship Management (DRM). This is a powerful financial reference data master, with best in class hierarchy management capabilities, and a business user friendly enterprise dimension mastering tool with deep integration into Enterprise Performance Management (EPM).

The following figure illustrates the full MDM suite of master data applications.
Master Chart of Accounts, Customer, Supplier, Partner, Distributor, Regulator, Contact, Organization, Family, Constituent, Product, Item, Catalog, Medical Procedure, Calling Plan, Asset, Parts, SKU, Service, etc. with all their hierarchies and cross references all on one platform.

SOLUTION BENEFITS

Business Process Optimization

Enterprise business processes cross operational lines of business (LOBs). For example, the Order to Cash process crosses sales, order management, and accounts receivable departments. These LOBs have their own operational applications. Data inconsistencies between these applications must be resolved as the Order to Cash process crosses the application boundaries. Poor quality data will break the process and send it to expensive manual corrections or worse. MDM resolves data quality issues and application inconsistencies, insuring that business processes do not break down. What’s more, MDM can provide business processes with additional customer, supplier, site and product information that will allow for maximum efficiencies at process flow decision points.

Increase Application ROI

Many organizations are not realizing the anticipated ROI in the applications they have deployed to help run their business more efficiently. There are two primary reasons why this is the case. One is related to poor data quality, and the other is related to application integration issues. In the latter case, new applications must integrate into existing IT landscapes with a vast array of data connections that must be built correctly before operational status is achieved. This often creates significant project delays that dramatically reduce ROI. Data quality issues aggravate this situation even more. Poor quality customer data can kill a Customer Relationship Management (CRM) initiative. Poor quality supplier data can seriously limit the advantages anticipated from a Supply Chain Management application. And poor quality product data can negatively impact the ROI in Product Lifecycle Management applications.

Oracle MDM helps organizations realize the return on existing and new application investments.
Strategic Entry Point for SOA
Service Oriented Architecture (SOA) is a modern technology for adding business process flexibility to existing IT infrastructures. Forrester\(^1\) considers MDM the most “strategic entry point for SOA” bringing the most strategic value to the business. But the anticipated improvements are never realized when data quality issues abound in the underlying applications. In fact, Gartner\(^2\) has pointed out that, without quality data, “…SOA will become a veritable ‘Pandora’s box’ of information chaos within the enterprise.” Oracle MDM insures that the potential value of SOA deployments is achieved.

Foundation for Data Warehousing and Business Intelligence
MDM holds the single version of the truth for key business entities (customer, supplier, product, location, etc.). These are in fact the key dimensions around which analytical analysis is executed. In addition, MDM holds the cross reference and hierarchies for these dimensions. For example, it is the MDM hub that maintains the universal customer ID along with the ID of the customer in every attached system. MDM feeds the dimensions, hierarchies and cross reference to the Data Warehouse and other analytical systems such as operational dashboards and reporting tools. Without MDM enterprise business intelligence (BI) is running on the old garbage in garbage out paradigm, no matter how sophisticated the BI software may be.

End-to-End Data Quality
MDM Aware applications are operational applications that know their data has meaning beyond their own functional area. They know to check with the external source at data entry, take updates from the source, and update the source when master data changes. When data quality is guaranteed at the point of entry, the enterprise data is always clean and up to date. Oracle MDM, in conjunction with Oracle Application Integration Architecture (AIA) turns Oracle Applications into MDM Aware Applications. What’s more, it provides a user interface (UI) and hooks to turn non-Oracle applications into MDM aware applications. This is powerful capability that differentiates Oracle MDM from all other vendors.

Support for Data Governance
Good governance is a growing concern for organizations around the world. Business Policies lead to Information Policies that lead to Data Policies that require strong controls. Data Governance and Master Data Management need each other for the full potential if either to be realized. Over the years, significant progress has been made on the Governance organizational front, but tools to actually implement the information policies developed by data governance committees were not available. MDM on the other hand, incorporates the tools to enforce data standards, but lacks the ability to know what those standards should be. Together, they complete the link from corporate policy to data controls.

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\(^1\) June 2006, Best Practices “Eleven Entry Points To SOA For Packaged Applications”
\(^2\) The Essential Building Blocks for EIM, Gartner 2005
Key Step for ERP Consolidation

ERP consolidation projects that simultaneously swap out operational applications along with their data run into complex issues when problems arise. It is an extremely expensive and time consuming process to determine if the new application logic is at fault or if there is a problem with the data. To lower ERP consolidation risks, the smart strategy is to execute a two step process. First, consolidate the data into a MDM Hub. Then test the replacement applications using the live consolidated master data. Once proven to work on the real operational data, turn off the old applications. This greatly simplifies the retirement of existing applications.

Proven Capabilities and Real Measurable Business Benefits

Oracle has over 1,000 MDM customers around the world mastering customers, suppliers, products, assets, services, catalogs, citizens, patients, employees, partners, cost centers, charts of accounts and more. Scalability has been proven with customers managing hundreds of millions of records. Across the Oracle MDM customer base, billions of records are under management. Many customers have been in production for over 6 years.

MDM brings its own ROI in a wide variety of business activities from cost savings to revenue enhancements. On average, our customers are able to:

- Increase campaign response rates by 15%
- Reduce new product introduction times by 20%
- Reduce time to value by 15%
- Improve sales order processing by 5%
- Reduce integration costs by 20%
- Increase cross-sell and up-sell efficiency by 3%
- Improve customer retention by 2%
- Reduce reporting costs by 15%

In combination with Oracle Applications, MDM speeds deployment, sets the stage for downstream Fusion upgrades, facilitates the flexibility provided by SOA, and supports GRC. Oracle Enterprise MDM provides safe proven solutions for better data quality, lower cost integrations, and good governance.

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3 Percentages constructed through analysis of 9,000+ metrics. Included metrics have been identified through customer engagements, customer case studies, analyst reports, and industry publications.